

WHAT IS CLAIMED IS:

1. A device for gauging levels of stored objects, comprising:
two laser emitters for projecting laser light sources onto a stored
5 object and forming two laser dots;

a CCD camera for identifying image signals of said laser dots and/or
monitoring any alteration of said stored object; and

10 a timer circuit for calculating time interval between said image
signals of said laser dots.
2. The device for gauging levels of stored objects as in claim 1, wherein said
stored object can be in the form of liquid or powder particle.
- 15 3. The device for gauging levels of stored objects as in claim 1, wherein said
laser emitters can be laser pointers.
4. The device for gauging levels of stored objects as in claim 1, wherein said
20 CCD camera and said laser emitters are mounted on an identical base.
5. The device for gauging levels of stored objects as in claim 1, wherein said
device for gauging levels of stored objects can further comprise floating
reflectors that float on the surface of said stored object such that said laser
25 light sources may cause laser dots thereon.
6. The device for gauging levels of stored objects as in claim 5, wherein both
ends of said floating reflectors can be incorporated respectively with a
vertical wire or a vertical rod, such that said floating reflectors can be
30 parallel to said stored object.
7. The device for gauging levels of stored objects as in claim 6, wherein the
other end of either said vertical wire or said vertical rod can be
incorporated with a counterweight.
- 35 8. The device for gauging levels of stored objects as in claim 1, wherein a
transparent divider can be disposed between said device for gauging
levels of stored objects and the storage tank.

9. The device for gauging levels of stored objects as in claim 8, wherein said transparent divider can be a piece of strengthened glass.

5 10. The device for gauging levels of stored objects as in claim 1, wherein said device for gauging levels of stored objects can be mounted within a light-blocking mask.

10 11. The device for gauging levels of stored objects as in claim 1, wherein said timer circuit further comprises a plurality of logic gates, timing counter, a plurality of triggers, a scan line timer and a microprocessor.

15 12. The device for gauging levels of stored objects as in claim 11, wherein said plurality of logic gates are for confirming whether dot signals are located in the scan area.

20 13. The device for gauging levels of stored objects as in claim 11, wherein said timer counter is for calculating the time interval between said two dot signals.

14. The device for gauging levels of stored objects as in claim 11, wherein said plurality of triggers are for actuating or interrupting said timer counter.

25 15. The device for gauging levels of stored objects as in claim 11, wherein said scan timer is for counting the number of scan lines and transmitting interrupting signals to said microprocessor according to the counting results.

30 16. The device for gauging levels of stored objects as in claim 11, wherein said microprocessor is for running interruption programs according to said interrupting signals and for comparing and converting scan data.

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